METHOD FOR EVALUATING COLOR PICTURE TUBES AND DEVICE FOR THE SAME AND METHOD FOR MAKING COLOR PICTURE TUBES

ABSTRACT OF THE DISCLOSURE

A method for evaluating a color picture tube includes displaying on a display surface of a color picture tube a measurement pattern including a plurality of first patterns arranged at different positions relative to fluophor dots of said color picture tube and a plurality of second patterns near said first patterns and sufficiently large relative to said fluophor dots. A first image is obtained using an imaging element to image said displayed measurement pattern. A second image is obtained using said imaging element to image while controlling light intake to allow brightness components of no more than about 1% of maximum luminance from said first image to be separated from noise and imaged. A third image is created by combining said first image and said second image while adjusting scales according to a light intake ratio. From said third image, display center positions of said plurality of first patterns is calculated using said second pattern positions. Discrete fluophor emission intensity distributions is calculated for each of said plurality of first patterns. An electron beam intensity distribution is obtained by matching display center positions of said plurality of first patterns and combining said plurality of first patterns.